15

module being transported from said first computer to said second computer for execution by said second computer upon receipt whereby a user at said second computer may establish on-demand remote control of the application program on the first computer to provide input to and view output from the application program at said first computer.

2. The system of claim 1 further comprising:

a remote control service publisher (RCSP) server for selecting and transporting said remote display module in response to a user request for an application program.

3. The system of claim 2 further comprising:

a remote application server (RAS), said remote application server selecting an application program and corresponding AIM for activation in response to a request for activation of an application program from said remote display module, said AIM corresponding to said selected application program communicating remote control protocol messages in said remote control protocol with said remote display module.

4. The system of claim 1 wherein said remote display module is executed by an interpreter in said second system to open an application window for said remote display module in said second computer system.

5. The system of claim 3 further comprising:

a browser at said second computer, said browser communicating with said RCSP to select and receive said remote display module corresponding to said requested application program.

6. The system of claim 5 said browser further comprising:

an interpreter for executing said remote display module received from said RAS.

7. The system of claim 1 further comprising:

a protocol translation and optimization module (PTOM) for converting an I/O stream encapsulated in a second remote control protocol communicated between said PTOM and said AIM to said first remote control protocol.

8. The system of claim 6 wherein said RCSP is a HTTP server and said remote display module is transported across a network to said second computer.

9. The system of claim 8 wherein said remote display module is transported across said network in response to activation of an applet tag of a HTML document.

10. The system of claim 1 further comprising:

a PTOM for reducing communication latency between said first and said second computers; and

a cache memory coupled to said PTOM, said PTOM retrieving data about said second computer from remote control protocol messages from said RDM and storing said data in said cache memory so that said data about said second computer may be communicated to said AIM in response to system calls received from said AIM whereby transmission of said system calls to said second computer are avoided.

11. A method for providing on demand remote control of an application program comprising the steps of:

transporting a remote display module from a first computer to a second computer;

executing said remote display module at said second computer to establish communication between a user

16

interface to computer resources at said second computer and said first computer through said remote display module; and

launching an application program and application interception module at said first computer to establish communication between said application interception module and said remote display module whereby input/output (I/O) messages are communicated between said application program and said user interface at said second computer.

12. The method of claim 11 wherein said remote display module is transported in an applet file.

13. The method of claim 12 wherein said remote display module is transported in response to activation of an applet tag of a HTML document.

14. The method of claim 11 wherein said remote display module is executed by an interpreter at said second computer.

15. The method of claim 11 further comprising the steps of:

converting I/O messages from said application program to remote control protocol messages for transmission to said remote display module at said second computer; and

converting remote control protocol messages received from said application interception module to I/O messages for said user interface at said second computer.

16. The method of claim 15 further comprising the steps of:

converting I/O messages from said user interface to remote control protocol messages for transmission to said application interception module; and

converting remote control protocol messages from said remote display module to I/O messages for said application program.

17. The method of claim 11 further comprising the steps of:

storing in a cache memory attribute data from remote control protocol messages received from said remote display module; and

retrieving a portion of said attribute data from said cache memory in response to an I/O message from said application program requesting said attribute data.

18. A method for providing on demand remote control of an application program, comprising the steps of:

determining that a user at a first computer system desires remote control over an application at a second computer system;

transporting over said network a remote control module to said second computer when demanded by said user, said remote control module enabling said first and second computer system to communicate remotely without pre-installing remote control software at said second computer prior to opening a communication session between the first and second computer; and

executing said remote control module at said second computer to establish a remote control communication between a user interface at said first computer and an application at said second computer.

* * * * *